Cardinal Glass Industries, Inc. 44046.203 DIALOG English-translation of JP Patent

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? s pn=JP 3187039
           2 PN=JP 3187039
     S8
? t s8/9/1
 8/9/1
DIALOG(R) File 351: Derwent WPI
(c) 2003 Thomson Derwent. All rts. reserv.
008999660
            **Image available**
WPI Acc No: 1992-126940/199216
XRPX Acc No: N92-094653
  Optical magnifying power rate compensator for facsimile printer -
bends light flux direction change mirror to vary magnification of image
focused on photoreceptive plane NoAbstract Dwg 1/6
Patent Assignee: ASAHI OPTICAL CO LTD (ASAO )
Number of Countries: 001 Number of Patents: 002
Patent Family:
Patent No
             Kind
                   Date
                            Applicat No
                                           Kind Date
                                                           Week
JP 4068856
                                            A 19900705 199216 B
              Α
                  19920304 JP 90178947
JP 3187039
             B2 20010711 JP 90178947
                                            Α
                                                19900705 200140
Priority Applications (No Type Date): JP 90178947 A 19900705
Patent Details:
Patent No Kind Lan Pg
                        Main IPC
                                    Filing Notes
JP 4068856
           Α
                    4
JP 3187039
                   4 H04N-001/028 Previous Publ. patent JP 4068856
            B2
Title Terms: OPTICAL; MAGNIFY; POWER; RATE; COMPENSATE; FACSIMILE;
PRINT; BEND; LIGHT; FLUX; DIRECTION; CHANGE; MIRROR; VARY; MAGNIFY;
IMAGE; FOCUS; PHOTORECEIVER; PLANE; NOABSTRACT
Derwent Class: P81; V07; W02
International Patent Class (Main): H04N-001/028
International Patent Class (Additional): G02B-007/19; G02B-007/198;
 G02B-017/00; H04N-001/02; H04N-001/04; H04N-001/19
File Segment: EPI; EngPI
Manual Codes (EPI/S-X): V07-K05; W02-J01A; W02-J02A1
? t s8/9/2
8/9/2
DIALOG(R) File 351: Derwent WPI
(c) 2003 Thomson Derwent. All rts. reserv.
008780135
            **Image available**
WPI Acc No: 1991-284152/ 199139
XRAM Acc No: C91-123031
XRPX Acc No: N91-217328
 Opto-magnetic recording medium with improved recording density - has
silicon carbide-nitride dielectric layer, magnetic layer and reflection
Patent Assignee: SHINETSU CHEM IND CO LTD (SHIE )
Number of Countries: 001 Number of Patents: 001
Patent Family:
Patent No
           Kind
                            Applicat No
                                           Kind
                                                           Week
                    Date
                                                  Date
JP 3187039 A 19910815 JP 89325208
                                          Α
                                                19891215 199139 B
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Fredrikson & Byron, P.A. March 20, 2003

Priority Applications (No Type Date): JP 89325208 A 19891215

Cardinal Glass Industries, Inc. 44046.203 DIALOG English-translation of JP Patent

Abstract (Basic): JP 3187039 A

Medium has, on transparent substrate (set on optical beam incidence side), (1) dielectric layer, (2) magnetic layer and (3) reflection layer, in which the dielectric layer is composed of SiC-SiN amorphous material.

ADVANTAGE - The dielectric layer has 1.70-2.30 refractive index, so that enhancing effect, Kerr effect, CN ratio and recording density are improved. In an example, SiC-SiN (30:70 mol ratio) amorphous dielectric layer was sputtered in a thickness of 0.2 microns on glass substrate in Ar gas atmosphere at 4 x 10 power (-2) Torr with 800 W h.f. power. The layer had 2.12 refractive index and 90.1% transmittance. Tb-Fe magnetic layer (20 nm thick), amorphous SiC-SiN dielectric layer (20 nm) and Al reflection layer (40 nm) were successively sputtered on the 1st dielectric layer. The opto-magnetic recording medium had no coercivity deterioration even after standing at 85 deg.C, 85% RH for 500 hours.

(6pp Dwg.No.1/6)

Title Terms: OPTO; MAGNETIC; RECORD; MEDIUM; IMPROVE; RECORD; DENSITY; SILICON; CARBIDE; NITRIDE; DIELECTRIC; LAYER; MAGNETIC; LAYER; REFLECT; LAYER

Derwent Class: L03; T03; W04

International Patent Class (Additional): G11B-011/10

File Segment: CPI; EPI

Manual Codes (CPI/A-N): L03-B05F

Manual Codes (EPI/S-X): T03-D01; W04-D01A

Derwent Registry Numbers: 1247-U

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S9 0 PN=JP 62168702

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Patent Abstracts of Japan

PUBLICATION NUMBER

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15-08-91

APPLICATION DATE

15-12-89

APPLICATION NUMBER

01325208

APPLICANT: SHIN ETSU CHEM CO LTD:

INVENTOR: KASHIDA SHU;

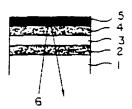
INT.CL.

G11B 11/10

TITLE

MAGNETO-OPTICAL RECORDING

MEDIUM



ABSTRACT:

PURPOSE: To generate large enhancing effect, to increase Kerr rotation angle and to improve recording density by providing a dielectric film, magnetic film and reflecting film on a transparent substrate arranged at the incident side of light, and forming the dielectric layer with amorphous material composed of SiC and SiN.

CONSTITUTION: On a transparent substrate 1 such as glass and polycarbonate resin formed with guide grooves for tracking, dielectric film 2, magnetic film 3, dielectric film 4 composed of the same material as the film 2, and reflecting film 5 are successively formed to constitute the magneto-optical recording medium. Light 6 incident on the substrate 1 is made to reflect by the film 5. In this constitution, the amorphous material for the films 2, 4 has such a molar composition ratio of SiC:SiN = 20 - 80 : 80 - 20 with Si:N = 0.6 - 1.34 of SiN. The refractive index of the amorphous material is specified to 1.70 - 2.30, and the amorphous material is formed by sputtering in gaseous Ar atmosphere. Thereby, thermal diffusion of laser beam can be reduced to prevent expanding of recording bit diameter.

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